were all horizental, and in the Peninsula ran from West to East. From the nature of the vibrations it may be suggested that the shock itself was at a considerable distance from Singapore. The exact direction in which the wave ran does not appear to be quite certain, as no one seems to have attempted to settle it by experiment at the time. From Malacca the vibrations are reported to have come from the N.N.W. and this is probable as they were more violent at Deli which is N.N.W. of Malacca. At Pasir Panjang they apparently travelled S.S.W. to N.N.E. or from S.W. to N. E. At Tanglin they appeared to travel from S.W. to N.E., but from the movements of a certain door, I believe they were really from the North-West.

In Medan, on the other hand they were felt as travelling from East to West. If this is correct, the starting point of the shocks must have been somewhere between South of Deli and North of Malacca, and a volcano called Sarek Berapi is said to have been the one from which the vibrations started. In conclusion, it is, I think, worth remarking that the weather for some time before the earthquake occurred was remarkably hot and oppressive in Singapore, as unusually hot weather has in other cases of earthquake been observed as preceding the shock.

H. N. R.

## ON THE OCCURRENCE OF THE RARE BAT-HAWK IN JOHOR.

In December last, the Bird Collector of the Raffles Museum shot in Johor a fine specimen of the very rare Hawk, *Machærhamphus alcinus* (Westerm.).

Of the genus *Machærhamphus*, only two species are known, viz., this one and *M. Andersoni*, whose habitat is Damara Land in South-West Africa, and Madagascar.

With reference to *M. alcinus*, Mr. E. W. OATES in his "Birds of British Burmah" says :--

" The slender-billed Pern is a very rare species, about which

" little is known. Mr. HOUGH procured one specimen at

## OCCASIONAL NOTES.

"Malewoon in Tenasserim, and Captain BINGHAM informs "me that he thinks he once saw it in the Thoungyeen Valley.

" It has been known to occur at Malacca, in Borneo, and in " New Guinea.

"This species is probably crepuscular in its habits; and if "this is the case its apparent scarcity is accounted for. An "allied species in Africa feeds on bats.

"This Hawk has a remarkably narrow carinated bill, large eves, a very wide gape and an elongated occipital crest."

The Johor specimen is about 18 inches in length, and its general colour is dark amber brown, almost black in parts; the throat and upper breast are white.

This is the only specimen of this bird in the Raffles Museum.

H. J. K.

## A LARGE BEETLE CAUGHT IN A PITCHER OF NEPENTHES.

The greater number of the insects which find their death in the pitchers of the pitcher plant (Nepenthes) are very small, such as ants, small cockroaches and flies, and I do not think that any insect has been found fairly entrapped as big as a beetle which I found recently in a pitcher of the beautiful *Nepenthes sanguinea* on the very summit of Gunong Ledang, commonly known as Mount Ophir. This was a female of the brown stag-beetle, *Odontolabris gazella*, 2 inches in length and I across the body, exclusive of the spread of its legs. It was quite dead and floating flat in the water contained in the pitcher, which was one of very large size.

## THE BIRD DROPPING SPIDER (ORNITHOS-CATOIDES) IN JOHOR.

Among the large number of curious and interesting spiders in the Malayan region, few are more remarkable than the *Ornithoscatoides*, which is so coloured as to exactly mimic a piece

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